

**REMARKS**

**Status of the Application**

Claims 1-29 are pending in the application. In all, the status of the claims is as follows:

Claims 1-29 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Claim 29 is rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

Claim 29 is rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over newly cited Japan 004 (JP 03-220004).

Claims 1, 15, 20, and 22-24 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier (US Patent 3,584,670) and/or newly cited Boiocchi et al. (US Publication 2002/0139460).

Claim 2 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier and/or newly cited Boiocchi et al. as applied above and further in view of Takasugi et al. (US Patent 5,358,021).

Claims 3, 5, and 8 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier and/or newly cited Boiocchi et al. as applied above and further in view of Japan 408 (JP 03-186408) and Takigawa et al. (US Patent 4,214,618).

Claims 4, 6, and 7 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier and/or newly cited Boiocchi et al. and

further in view of Japan 408 and Takigawa et al. as applied above and further in view of Japan 511 (JP 2002-225511) and Japan 107 (JP 62-059107).

By this Amendment, Applicants hereby amend claims 1 and 29.

**Claim Rejections – 35 U.S.C. § 112, Second Paragraph**

*Claims 1-29 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.*

The Examiner alleges that claim 1 is unclear, because the phrase “which designates directions to an inner and an outer side of a vehicle in a state where the tire is mounted on the vehicle” does not reasonably appraise the scope of protection afforded by the claim. In particular, the Examiner alleges that it is unclear whether the “designates directions” language relates to intended use or to additional structure.

Additionally, the Examiner alleges that the language “in a state where the tire is mounted on the vehicle” is unclear as to whether claim 1 is limited to a vehicle.

Finally, the Examiner alleges that claim 1 has an inconsistency between the phrases “in a state where the tire is mounted on the vehicle” and “the tire mounted on the vehicle” that causes the claim to be indefinite.

Applicants respectfully submit that one of ordinary skill in the art recognizes that the language “designates directions to an inner and an outer side of a vehicle” is directed toward an asymmetrical tire, an asymmetrical tire being designed to be mounted on a vehicle in one particular direction. Thus, to one of ordinary skill in the art, the language “designates directions to an inner and an outer side of a vehicle” indicates that the pneumatic tire has structure which designates the side of the tire which is mounted to face the inner side of the vehicle. As further evidence, Applicants hereby submit a Declaration under 37 C.F.R. § 1.132, signed by one of the

inventors, which attests that one of ordinary skill in the art would understand that the language “designates directions to an inner and an outer side of a vehicle” indicates that the pneumatic tire has a structure that requires which side of the tire can only be mounted to face either the inner or outer side of the vehicle.

With regard to whether claim 1 requires a vehicle, Applicants respectfully submit that the language “in a state where the tire is mounted on the vehicle” clearly does not require a vehicle, i.e., the vehicle is not a claim limitation. The language merely uses a vehicle as a frame of reference to properly define the location of the structures on the tire.

With regard to the alleged inconsistency in phrases, without conceding to the merits of the Examiner’s rejection, and in the interest of compact prosecution, Applicants hereby amend claim 1 to address any alleged deficiencies.

*Claim 29 is rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.*

Without conceding to the merits of the Examiner’s rejection, and in the interest of compact prosecution, Applicants hereby amend claim 29 to address any alleged deficiencies.

**Claim Rejections – 35 U.S.C. § 103(a)**

*Claim 29 is rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over newly cited Japan 004 (JP 03-220004).*

Claim 29, as amended, recites, in part, “the shoulder land part row of the axially inner side comprises a rib.” The Examiner alleges that Japan 004 discloses each of the elements of claim 1. Applicants respectfully disagree.

FIG. 1 of Japan 004 appears to show an asymmetrical tire, having circumferential grooves 2, 3, 4 and 5. The Examiner alleges that the region 6 corresponds to an inside region of the tire. Thus, the Examiner concludes that the land part between grooves 2 and 3 would correspond to the second inner land part row, and further concludes that the grooves separating the blocks are inclined at an angle  $\alpha$  of 10-50 degrees with respect to the axial direction Y-Y.

However, as shown in FIG. 1 of Japan 004, the shoulder land part of the axially inner side is divided by grooves 8. Due to the size of the grooves (6 mm wide), the shoulder land part of the axially inner side cannot correspond to a rib, as recited in amended claim 29.

Accordingly, as amended, claim 29 is patentable over the applied art.

*Claims 1, 15, 20, and 22-24 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier (US Patent 3,584,670) and/or newly cited Boiocchi et al. (US Publication 2002/0139460).*

*Claims 4, 6, and 7 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier and/or newly cited Boiocchi et al. and further in view of Japan 408 and Takigawa et al. as applied above and further in view of Japan 511 (JP 2002-225511) and Japan 107 (JP 62-059107).*

Claim 1, as amended, recites, in part, “the shoulder land part row of the axially inner side comprises a rib.” The Examiner alleges that a proposed combination of Japan 004, Verdier and Boiocchi would render claim 1 obvious. Applicants respectfully disagree.

As noted above with respect to claim 29, Japan 004 fails to disclose or fairly suggest that the shoulder land part of the axially inner side comprises a rib, as recited in amended claim 1. Verdier and Boiocchi fail to cure the deficiency noted with respect to claim 1.

Applicants note that the Examiner alleges that Japan 408 and Takigawa each disclose the fine circumferential groove recited in claim 4, and further alleges that Japan 511 and Japan 107 disclose disposing holes at a location axially inward of the location of a narrow groove. It appears that the Examiner also alleges that these references disclose that the shoulder land part of the axially inner side comprises a rib, but the Examiner does not explicitly indicate which of the applied references discloses the rib recited in claim 4.

Applicants respectfully submit that Japan 004 explicitly teaches away from a rib being disposed in the shoulder land part of the axially inner side. Specifically, FIG. 1 of Japan 004 shows oblique grooves 8 which open to the tread end. See page 10, lines 2-4 of the translation supplied by the Examiner. These grooves 8 are sized (6 mm wide) such that a rib cannot be formed. Further, Japan 004 notes that such grooves are desirable for providing sufficient grip force under dry surface conditions. See page 6, lines 14-22 of the translation provided by the Examiner. Thus, modifying the tire in Japan 004 to include a rib, as proposed by the Examiner, would destroy the functionality of the tire in Japan 004. Thus, even assuming, *arguendo*, that any one of Verdier, Boiocchi, Japan 408, Takigawa, Japan 511 and Japan 107 discloses a rib disposed on the shoulder land part of the axially inner side of a tire, the Examiner's proposed combination of references would not render amended claim 1 obvious, as the references actually teach away from the proposed combination.

Further, Applicants note that the Examiner's proposed combination of references would not function in the same manner as the tire recited in amended claim 1. In an exemplary embodiment of the tire recited in claim 1, when the tire with negative camber is mounted on a vehicle, the circumferential length of the shoulder land portion of the axially inner side is shorter than that of the shoulder land portion of the axially outer side. In this state, the shoulder land

portion of the axially inner side has to travel over the same distance as a reference length which is a circumferential length at the equatorial line during one turn of the tire. However, the circumferential length of the shoulder land portion of the axially inner side is shorter than the reference length, so that the shoulder land portion of the axially inner side is subjected to a circumferential tensile force which causes a slip between the land portion and the road surface and which acts to stretch the circumferential length of the shoulder land portion of the axially inner side. The rib as the shoulder land part row of the axially inner side exerts an effect to suppress a circumferential tensile deformation of the land portion. On the other hand, the shoulder land portion of the axially outer side has a circumferential length longer than the reference length, so that the shoulder land portion of the axially outer side is subjected to a circumferential compress force which acts to reduce the circumferential length. The block as the shoulder land part row of the axially outer side exerts an effect to suppress a circumferential compressive deformation of the land portion. As Japan 004 touts the benefits of having oblique grooves 8 which open to the tread end, the Examiner's proposed combination of references cannot obtain the results found by having the shoulder land part row of the axially inner side comprise a rib, as recited in claim 1.

Accordingly, for the reasons noted above, claim 1 would not be rendered obvious by the Examiner's proposed combination of references, and claim 1 is patentable over the prior art.

Claims 4, 6, 7, 15, 20, 22-24 are patentable at least by virtue of their dependency from amended claim 1.

*Claim 2 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier and/or newly cited Boiocchi et al. as applied above and further in view of Takasugi et al. (US Patent 5,358,021).*

Claim 2 depends from amended claim 1. Because the Examiner's proposed combination of Japan 004, Verdier and Boiocchi fails to render amended claim 1 obvious, and because Takasugi fails to cure the deficiencies noted with respect to amended claim 1, claim 2 is patentable at least by virtue of its dependency from amended claim 1.

*Claims 3, 5, and 8 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over newly cited Japan 004 in view of newly cited Verdier and/or newly cited Boiocchi et al. as applied above and further in view of Japan 408 (JP 03-186408) and Takigawa et al. (US Patent 4,214,618).*

Claims 3, 5 and 8 depend from amended claim 1. Because the Examiner's proposed combination of Japan 004, Verdier and Boiocchi fails to render amended claim 1 obvious, and because Japan 408 and Takigawa each fail to cure the deficiencies noted with respect to amended claim 1, as noted above, claims 3, 5 and 8 are patentable at least by virtue of their dependency from amended claim 1.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Dion R. Ferguson/

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

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Dion R. Ferguson  
Registration No. 59,561

WASHINGTON OFFICE

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